

FSA Integration Partner

United States Department of Education

Federal Student Aid



**Data Strategy Enterprise-Wide
Enrollment and Access Management Team
123.1.26 Enrollment Business Objectives and
High Level Requirements**

Task Order #123

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June 30, 2003



Executive Summary

The Enrollment and Access Management initiative reviews FSA's existing offerings for Enrollment and Access Management and documents FSA's Business Objectives and High-Level Requirements. This document is the first step in formulating a high-level design for implementing a new vision.

Currently, enrollment and access management processes and tools operate on a non-centralized, non-standardized basis. As a result, Trading Partner interactions with FSA systems are fragmented and complex. In addition, these processes have often been inconsistently implemented particularly relating to user access rights.

Application reviews were conducted for each FSA system. These reviews captured current Enrollment and Access Management procedures. As a result of these sessions, several observations were made. Most prominently, inconsistent implementations have created points of confusion among Trading Partners regarding enrollment and access management procedures.

Initial system meetings facilitated the first stage of gathering business objectives and high-level requirements. Further exploration of FSA's business needs occurred during Core Team and Business Objective Meetings. These sessions included representatives from the Delivery and Eligibility, Servicing, and Applications areas.

The participants reached consensus on the following stated objectives and requirements, which were analyzed and aggregated into 16 business objectives and 70 high-level requirements. Of the business objectives identified, 11 business objectives are both Enrollment and Access Management focused:

- A1.1 - Focus on registration processes and access decisions at the enterprise level instead of on a per system basis.
- A2.1 - Manage enrollment and access privileges at the enterprise level.
- A2.2 - Improve self-service capabilities.
- A2.4 - The enrollment and access solution should be flexible enough to support the requirements of current and future FSA systems.
- A2.5 - Allow users to customize their experience with FSA systems.
- A3.1 - Streamline enrollment and access management for Trading Partner services.
- B3.1 - Meet FSA regulatory compliance requirements.
- C1.1 - Facilitate access to sets of data at the enterprise level.
- C2.1 - Create enterprise policy and standards for enrollment and access management.
- C3.1 - Provide effective training and customer support across FSA systems.
- C3.2 - Adopt enrollment and access management policies that improve business processes.



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The other five business objectives are Access Management specific and are contained in the accompanying Access Management Business Objectives and High-Level Requirements deliverable:

- A2.3 - Balance easier access and system security.
- B1.1 - Adopt a uniform decision making process for evaluating users requesting access to FSA systems.
- B2.1 - Provide effective oversight of user access to FSA systems.
- C2.2 - Maintain security of FSA systems.
- C2.3 - Provide users with access to FSA systems appropriate for their job function.

The process of analyzing the current environment and documenting business objectives produced the following guiding principles that will drive the High-Level Design:

- **Balance of Access and Security** - FSA wishes to create more efficient and easier-to-use processes, but not at the expense of controls to protect FSA resources.
- **Solution Flexibility** - FSA systems will not remain static. Enrollment and access management solutions need to be flexible and accommodate the requirements of future system reengineering and consolidation efforts.
- **Technology** - Many of the FSA high-level requirements involve new functions that may require technical solutions. Examples identified include single sign-on functions, automation of enrollment and access management, and user self-service capabilities. Before technology is incorporated into the FSA vision or high-level designs, FSA must balance cost and functionality.
- **Effective Communication Processes** - Enrollment and Access Management systems are important as entry points and ongoing contact points for FSA Trading Partners. Interactions with Trading Partners can establish effective communications channels that FSA can leverage for a variety of purposes.
- **Other FSA Initiatives** - Enrollment and Access Management must be coordinated with several other projects across FSA. This effort must also be coordinated with the FSA Security Architecture development work, RID and other Data Strategy projects, Integrated Partner Management responsibilities, Case Management Oversight efforts, and the PIN Site Reengineering project.

The business objectives and high-level requirements identified in this phase provide a foundation for future enrollment and access management solutions. The team will validate and prioritize the business objectives before identifying possible solution options. Based on the prioritized business objectives, Enrollment and Access Management will create a vision for an enterprise approach to enrolling and managing access for Trading Partners. Consolidating processes and tools will improve FSA control of critical enrollment and access management functions, increasing the efficiency of these processes and decreasing administrative costs. Most importantly, an enterprise approach will insulate Trading Partners from the complexities of the internal FSA enrollment and access management processes and improve the effectiveness of FSA service delivery.



Data Strategy Enterprise-Wide Enrollment and Access Management Business Objectives and High-Level Requirements

Amendment History

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1 Introduction

1.1 Background

The Department of Education's Office of Federal Student Aid (FSA) seeks improvements to data quality and data consistency. FSA is examining its overall approach to data to ensure accurate and consistent data exchange between customers, Trading Partners, and compliance and oversight organizations. FSA will also leverage a targeted data strategy to support program-wide goals of maintaining a clean audit and removing FSA from the GAO high-risk list.

Task Order 123 will define FSA's Enterprise Data Vision and its overall Enterprise Data Strategy. The end result of this task order will be an enterprise data framework that integrates the following components, addressing FSA's major data-related issues:

- FSA Data Strategy Framework
- Technical Strategies
- XML Framework
- Common Identifiers
- Enrollment and Access Management

Current enrollment and access management processes at FSA are very fragmented and complex. In addition, these processes have often been inconsistently implemented, particularly relating to access rights. The Enrollment and Access Management initiative will review FSA's current offerings for Enrollment and Access Management and document FSA's Business Objectives and High-Level Requirements. The high-level design will provide a roadmap for implementing a new vision.

Analysis and design activities for enrollment and access management are coordinated with RID and other Data Strategy projects. Integration of data collection and analysis work among these projects will provide a foundation for streamlining and simplifying Trading Partner enrollment and user access management across the enterprise.

1.2 Objective and Definition of Terms

The primary objective of the Enrollment and Access Management Team is to review and analyze FSA's current Enrollment and Access Management environment and look for ways to simplify these business processes for Trading Partners. The Enrollment and Access Management project was created in response to several key points:

- Currently, enrollment and access management processes and tools operate on a non-centralized, non-standardized basis. As a result, Trading Partner interactions with FSA systems are fragmented and complex.
- A simplified business process will reduce confusion among system-users relating to the hand-offs between Enrollment and Access Management.
- Processes for managing user access rights have often been inconsistently implemented.



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For the purposes of this deliverable, *Enrollment* is defined to include both the Title IV enrollment certification process, which authorizes Trading Partners to participate in Title IV programs, and the initial registration of the Trading Partner's delegated administrator in various FSA systems. The term *registration* includes collection and processing of program and organization information to support approval, and the process of communicating the results of the eligibility decision to the Trading Partner. Registration does not include the eligibility decision process itself.

Access management is the term used to describe policies, processes, and tools that define user access privileges and roles; issue and approve user identity credentials that are linked to access privileges; and create, modify, audit, and remove user access to FSA systems. This definition includes processes and functions often referred to as "Identity Management" in the field of information security. Appendix A provides a more detailed discussion of the relationship between the term "access management" as used by the Enrollment and Access Management Team and the way this term is used by information security industry groups and product vendors.

Trading Partner is defined as all non-student groups that use FSA Systems. Trading Partners include post-secondary institutions (schools), other entities eligible to act on the behalf of schools, lenders, and audit and regulatory organizations. For the purposes of this deliverable, FSA staff and contractors are also included within the definition of Trading Partner.

1.3 Scope

This deliverable covers work defined in Task Order 123 related to documentation of Enrollment and Access Management Business Objectives and High-Level Requirements. The intent of the Enrollment and Access Management effort is to review and analyze FSA's current Enrollment and Access Management environment and look for ways to simplify the business process for Trading Partners. This effort will define the business objectives, high-level requirements, and high-level design for schools, other entities eligible to act on the behalf of schools, FSA staff, contractors, and audit and regulatory organizations in accessing FSA systems.

Deliverables 123.1.26 and 123.1.27 document the enrollment and access management business objectives and high-level requirements identified as a first step toward creating an updated enrollment and access management vision for FSA. Identifying specific solutions is not within the scope of this deliverable. The next phase of this project will consider solution options and develop a high-level design for enrollment and access management.

Several participants in this project noted examples of FSA policies and standards that may need to be created to support a new vision for enrollment and access management processes. Having the appropriate FSA security and privacy policies will be critical to successful deployment of an Enrollment and Access Management solution. Although the existing FSA security and privacy policies are not analyzed in detail in this deliverable, several of the high-level requirements do



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address needs for policies and standards to cover specific topics related to enrollment and access management.

The information presented in this report was derived from existing FSA documentation and meetings with FSA personnel and contractors to define AS-IS processes. Validation and cross referencing of information was conducted as time permitted. The information provided by both participating Core Team members and the subject matter experts provided the primary input to produce the high level process flows, business objectives and conclusion contained within this document. Objectives gathered during interviews and workshops will be considered for the target state but have not yet been categorized as final requirements. These business objectives and high-level requirements represent a combination of existing and desired functions and will need to be reviewed and updated to create an enterprise vision. Only after a detailed review, examination of potential gaps and barriers, and cost/benefit analysis, will the requirements list be finalized.

Some business objectives identified in this effort do not apply only to Enrollment and Access Management systems, but extend across the entire Data Strategy effort. Additional FSA enrollment and access management business objectives or high-level requirements may be defined through related system and application development efforts, as well as related projects that are part of the Data Strategy task order. These additional objectives and requirements will be integrated as appropriate into the FSA enrollment and access management vision.

1.4 Organization of This Document

This document, Deliverable 123.1.26, and the companion document, Deliverable 123.1.27, present the Enrollment and Access Management Business Objectives and High Level Requirements for Task Order 123. They contain a summary of work accomplished during the initial phase of this project, an overview of current Enrollment and Access Management processes currently employed at FSA, and the Business Objectives and High-Level Requirements gathered from FSA. The finalized list of Business Objectives and High Level Requirements will serve as an input to future High Level Design and visioning activities that are part of this Task Order.

The organization of this document is summarized below:

- Section 1 – *Introduction* discusses the context and background for the project and this deliverable.
- Section 2 – *Current State* examines the enrollment and access management processes currently employed at FSA. This section summarizes completed activities and analyzes existing processes.
- Section 3 – *Business Objectives* documents the Business Objectives and High-Level Requirements identified by FSA. This section defines Business Objectives and High-Level Requirements, reviews the framework used to group Business Objectives, and



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examines each Business Objective and example High-Level Requirement in greater detail.

- Section 4 – *Conclusions and Next Steps* describes recommended next steps for analyzing and integrating Business Objectives and High-Level requirements to create an FSA vision for the future. This vision will be documented in the Enrollment and Access Management High-Level Design.

The Task Order specifies that the Enrollment Business Objectives and High-Level Requirements and Access Management Business Objectives and High-Level Requirements be documented in separate deliverables. Deliverables 123.1.26 and 123.1.27 are organized as the Task Order specified, but the documents are closely related. Deliverable 123.1.26 contains business objectives and high-level requirements for FSA Enrollment. Because they are closely related, some business objectives apply to both Enrollment and Access Management. Short descriptions for business objectives that apply only to access management are included in Deliverable 123.1.26. Additional detail for the FSA Access Management business objectives and high-level requirements can be found in Deliverable 123.1.27.

1.5 Approach

The Enrollment and Access Management initiative is composed of two major phases. This first phase consists of business objective gathering and commenced on April 8, 2003. The next phase includes high-level designs and is to conclude November 17, 2003. Four major deliverables are planned:

- Deliverable 123.1.26 - Enrollment Business Objectives and High-Level Requirements. This deliverable documents FSA's business objectives and high-level requirements for providing integrated enrollment management for Trading Partners.
- Deliverable 123.1.27 - Access Management Business Objectives and High-Level Requirements. This deliverable documents FSA's business objectives and high-level requirements for providing Access Management for Trading Partners and FSA personnel in accessing FSA systems.
- Deliverable 123.1.28 - Enrollment High-Level Design. This deliverable (due on 11/17/03) will define the high-level design for providing an integrated enrollment management for Trading Partners.
- Deliverable 123.1.29 - Access Management High-Level Design. This deliverable (due on 11/17/03) will define the high-level design for providing integrated access management process for Trading Partners.

An initial Core Team project kickoff meeting was held on April 30, 2003. Eighteen information-gathering meetings were also held with Core Team members and system owners to understand and document current Enrollment and Access Management procedures for each system. The following chart summarizes the systems covered and the participants for the information gathering sessions:



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System(s)	Participant(s)	Interview Date
CPS	Angeline Iwanicki	05/13/03
Participation Management SAIG	Gregory James, Paul Steinhauer	05/14/03
COD	Tony Milidantri, Ted Taverner/Renee Wade	05/15/03 05/20/03
FAA On-line	Nina Colon	05/15/03
Eapp PEPS	Jay Long, Chris Hill, Patricia Patterson	05/19/03
eCB	Rich Bennett, Tammy Connelly	05/20/03
DLSS	Randy Bowman, Allen Prodggers	05/20/03
DLDM	Randy Bowman, Allen Prodggers	05/20/03
eZAudit	Randy Wolff, Matt Portolese	05/21/03
CMDM	Andy Cho	05/21/03
NSLDS	Pam Eliadis, Andrea Wise	05/21/03
FMS - Core App FMS - LaRS FMS - LAP FMS - GAFR	Stephen Mallack, Pamela Jefferson, Matt Fontana, Angela Baker, Frank Ramos	05/22/03
FPDM	Nettie Harding	05/22/03
Schools Portal	Colleen Kennedy	05/28/03
IFAP	Colleen Kennedy	05/28/03
Collections (DMCS)	Gregory Plenty, Courtland Smith, Steve Martus	05/29/03
Consolidation (DLCS)	Denise Leifeste, Bill Burns, David Yang	05/30/03
FMS - LEAP/SLEAP	Greg Gerrans	06/06/03

Figure 1.1 – Information Gathering Sessions

Additional information on the Information Gathering Participants and meeting summaries are presented in Appendix C – Questionnaires.

An iterative approach was employed to identify and validate sample business objectives. Initial business objectives were drafted from the Business Integration Group’s general security objectives, the overall data strategy effort business objectives sessions, and individual information-gathering sessions held with the Core Team members and system owners. Next, all of those Business Objectives were organized according to the Business Integration Group (BIG) Vision Framework. Finally, three group meetings were held with representatives from the areas of Delivery and Eligibility, Servicing, and Applications during the week of June 9–13,



2003. The Business Objective meeting participants and meeting summaries are in Appendix B – Business Objective Meeting Summaries. In each meeting the sample business objectives were reviewed and validated. Additional business objectives were also identified and documented. After each meeting the business objectives were summarized and analyzed. Finally, the Business Objectives were discussed and validated during a Core Team meeting on June 25, 2003.

Upon completion of this deliverable, the Enrollment and Access Management Team will proceed with work in the next phase of the initiative, high-level design.

1.6 Initial Findings and Observations

Detailed Enrollment and Access Management findings are described in Section 3 – Business Objectives. However, several overall findings and observations were made during the process of conducting information-gathering sessions and analyzing the business objective and high-level requirements. These general findings and observations are summarized below:

- **Current FSA enrollment and access management processes are very complex.** As demonstrated in the analysis of the current state, there are many points of confusion for users about system responsibilities and access procedures. For example, many users refer to SAIG as the system that manages participation to a group of FSA systems. However, SAIG primarily manages the exchange of files. It is the Participation Management system (PM) that manages Data Point Administrator (DPA) sign-up for a selected group of systems, including SAIG. The perception that it is SAIG that manages the sign-up process may confuse users trying to request access to other systems. *Future business processes should insulate Trading Partners from the underlying complexities of FSA system interactions.*
- **Enrollment and Access Management solutions will require integration across policies, processes, and technologies.** Discussions about business objectives and high-level requirements for enrollment and access management touched on a variety of FSA operational processes, policies, and technologies. These discussions highlighted the fact that the future vision for enrollment and access management must support an integrated set of solutions in line with FSA business goals. No single technology or process change will be able to meet all objectives.
- **Enrollment and Access Management should be considered from an enterprise perspective.** Most enrollment and access management processes currently operate on a system-by-system basis. Many participants articulated a need to focus on processes and solutions at the enterprise level. An enterprise approach to enrollment and access management will also result in streamlined processes, increased efficiency, reduced costs, improved handling of enrollment and access management data, and improved services to Trading Partners.
- **Enrollment and Access Management objectives will need to be prioritized.** FSA business objectives for enrollment and access management represent a wide range of capabilities that will need to be prioritized during later phases of this project. Some business objectives reflect current business processes. Other objectives described new



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processes and functions that do not currently exist. Such new capabilities may involve reengineered processes or the development of new technical solutions. They will need to be analyzed for feasibility since they may require substantial effort to define and implement.

- **Enrollment and Access Management will be enabling systems for some FSA objectives.** Not all the FSA business objectives identified were confined to single functional areas, and several extend beyond the boundaries of the Enrollment and Access Management project. Some of the business objectives identified are functions or processes that Enrollment and Access Management must support, but are not capabilities that would be directly deployed as part of enrollment and access management systems. For example, user personalization functions are usually implemented within systems and applications, although they will need to exchange identity information with enrollment and access management systems. The business objectives defined during this project must be coordinated with other FSA efforts to provide the appropriate context for design and integration.
- **Enrollment and Access Management systems will need to integrate with FSA Security and Privacy Policy.** Several security and privacy efforts are under way within FSA. The FSA Information Technology Security and Privacy Policy effort provides a foundation for future information security and privacy guidelines, standards, processes, and procedures. The Security Architecture initiative developed a proposed FSA Security and Privacy Architecture vision consisting of security services, technical components, and standards to guide planning and development for security across FSA. The Enrollment and Access Management effort will need to document security and privacy policy implications and coordinate them with the FSA security organization during system design and development phases.
- **Other FSA initiatives will affect the design of enrollment and access management capabilities.** Planning for Enrollment and Access Management solutions will clearly depend on other Security and Data Strategy project initiatives. In addition, Enrollment and Access Management has a variety of potential integration points with other FSA projects including Case Management Oversight (CMO), PIN Site Re-engineering (PIN), Integrated Partner Management (IPM), and Common Services for Borrowers (CSB). These efforts will need to be consulted during the upcoming high-level design phase.



2 Current State

2.1 Introduction

Currently, the FSA portfolio of applications consists of 21 systems that Trading Partners use to originate, disburse, collect, and manage Title IV Financial Aid for students. These 21 applications provide services to Trading Partners and do not include all FSA systems (e.g. FSA internal systems). This environment has grown in complexity over the years. It is hosted on five different hardware platforms and runs on four different application servers located in multiple data centers. Trading Partner systems are operated by eight separate contractors, and are supported 11 help desk and customer care centers. Needless to say, it has become difficult for Trading Partners to do business with FSA. Likewise, it has become difficult for FSA to manage Trading Partner access across these systems.

Some Trading Partners have as many as 10 separate user names and passwords, and must log on to each application separately to obtain cross-system information. Even a relatively simple process, like resetting passwords, can be confusing because of the number of systems involved and the different methods that apply to each system. From an FSA perspective, managing user access on a system-by-system basis has become expensive and unwieldy. As Trading Partners add, terminate, and change individual users and roles within their organizations, the burden of properly tracking user permissions across applications is a growing challenge. This also means that the risk of allowing unauthorized access to FSA data increases as new systems are added.

2.2 Relationship Between Enrollment and Access Management

The current FSA environment is very complex and includes many entry points through which Trading Partners can access FSA data. The process of approving individual users and then authorizing them to access FSA data varies greatly depending on the type of Trading Partner and the data that is being accessed. The variability in processes and terminology used in the current FSA environment make it difficult to determine the exact boundary between the enrollment and access processes. For the purpose of this analysis, the Enrollment and Access Management Team decided that the process of enrollment includes Trading Partner enrollment in Title IV programs, and the initial registration of the designated administrator. The access management process is considered to begin when the designated administrator starts processing individual user requests for access to FSA systems. The diagram below (Figure 2.1) shows this interaction between enrollment and access management and emphasizes their close relationship. The enrollment and access management processes will be discussed separately in the following sections.



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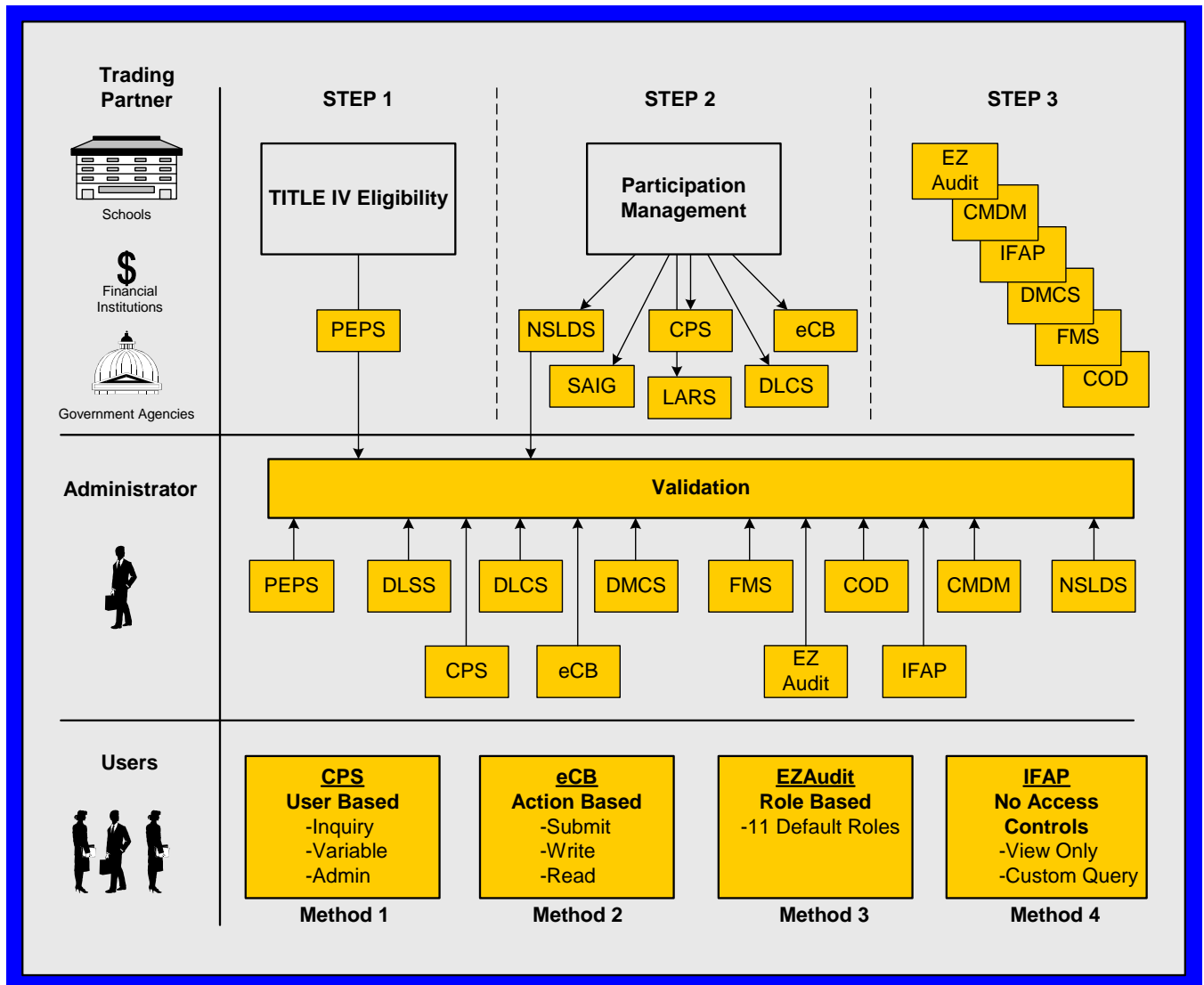


Figure 2.1 – Enrollment and Access Management Relationship

2.3 Methodology

The first step in the analysis of existing enrollment and access management processes was to gather information about the current system enrollment and access methods for each FSA system. To capture this current state information, a detailed questionnaire was developed and distributed to application subject matter experts identified by FSA. These contacts are listed in the table shown in Section 1.4. Individual meetings were then conducted with each application expert to complete the questionnaire. The questionnaires were pre-populated with information gained from preliminary research of FSA application websites and Integration Partner resources. This preliminary work enabled the access and enrollment team to become familiar



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with each application's enrollment and access management processes. More importantly, this research allowed the team to validate existing information and to ensure that individual application meetings would be as productive as possible. Following each application meeting the questionnaires were updated then redistributed to the application experts for review and feedback. Appendix C of this deliverable contains copies of the completed questionnaires.

Information from the questionnaire about the users or Trading Partners needing access to each system is shown in Figure 2.2. This figure shows the systems each Trading Partner uses to do business with FSA. Noted in the right-hand column is the total number of systems required for each Trading Partner. Readily apparent is the complex nature of FSA systems and the variety of interactions required for each Trading Partner. The number of systems required by each Trading Partners varies; Postsecondary Institutions (schools), 3rd party services, customer service representatives, and guarantee agencies use as many as 10 systems each, while lenders, Private Collection Agencies (PCAs) and Federal and State agencies use five systems or less. Note that although the table shows that all 21 systems are available to internal FSA users and contractors, but a single individual user would not typically need access to that many systems. Further analysis across business functions within FSA will be needed to determine which groups of FSA users require access to multiple systems.

	FSA Systems																			
	Title IV		Participation Management							Other Systems										
Enrollment & Access Management	PEPS (eAPP)	SAIG	FAA Access On-line	CPS	eCB	DLSS - eServicing/non-Student	NSLDS - Non-Student	FMS - LARS	Delinquent Loans Datamart	COD	EZ Audit	Credit Management Datamart	FMS	FMS - GAFR	FMS - LEAP/SLEAP	FPDM	Schools Portal	IFAP	DMCS	DLCS - Non-Student
																				Totals
Trading Partners																				
Post Secondary Institutions		10
3rd Party Servicers	10
Internal FSA Users/Contractors	21
Customer Service	10
Guarantee Agencies	9
PCA's	1
State Agencies	5
Federal Agencies	3
Lenders	5
Others	1

Figure 2.2 – FSA Systems & Trading Partner Interaction



2.4 Overview of Current Enrollment Process

There is no unified process by which Trading Partners become eligible to participate in Title IV programs. Rather, the method or entry point depends on the type of Trading Partner. Although the enrollment process differs, it can be broken down into three distinct steps:

1. Title IV enrollment
2. Participation Management (PM)/SAIG enrollment
3. Other remaining individual system(s) enrollment

These high level “steps” are depicted in Figure 2.3 and described further below. Section 2.5 of this deliverable provides representative process flows for each step of enrollment.

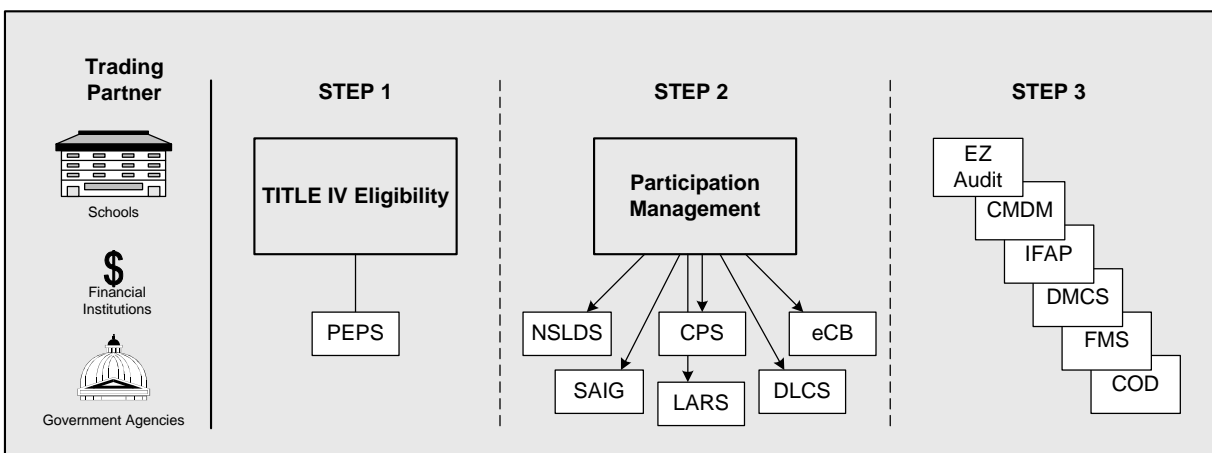


Figure 2.3 - Trading Partner Enrollment Steps

Step 1: Title IV Enrollment

Title IV of the Higher Education Act of 1965 (as amended in 1998) establishes general rules that apply to the student financial assistance programs. The existing Title IV Programs include:

- Federal Pell Grants
- Federal Perkins Loans
- Federal Supplemental Educational Opportunity Grants (FSEOG)
- Federal Direct Loans
- Federal Plus Loans

To participate in these programs Trading Partners must first go through an eligibility process to obtain authorization to participate in these Title IV programs. The process for each class of Trading Partner is described below.



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Postsecondary Institutions: The Postsecondary Institutions enrollment process can be completed online (See the process flow in Section 2.5.1) or as a paper-based manual process. Both of these processes include the following steps: obtaining an OPE_ID, proceeding through a Case Management and Oversight (CMO) eligibility review, signing a Program Participation Agreement (PPA) and eventually, if eligible, being entered into the Post Secondary Education Participation System (PEPS).

Guarantee Agencies: The Guarantee Agencies (GA) process begins with a request to participate in Title IV, submitted to FSA. Once the request has been made, the Financial Partners (FP) Channel at FSA handles it on an *ad hoc* basis. If approved, GAs are manually entered into the Financial Management System (FMS), PEPS and NSLDS by FP Channel personnel.

State Agencies: The State Agency process begins with a request for participation in Title IV programs via letter from the State Governor or a non-profit organization. The Financial Partners Channel at FSA handles the request on an *ad hoc* basis. If approved, FP Channel personnel manually enter State Agencies into the Financial Management System (FMS).

Lenders: The Lender process requires that a prospective Lender work with a GA. The GA sends a request to FSA for a new Lender ID. After receiving an email with their Lender ID, lenders must submit the Lender Application (LAP) in the LARS system. Once the lender is determined to be eligible, the FP channel updates PEPS with the eligibility information.

3rd Party Servicers: The 3rd Party Servicer process is aligned with either the Post secondary Institution process or the Lender process. There are two types of 3rd party servicers: Servicers that act on behalf of Schools (Post Secondary Institutions) and Servicers that act on behalf of Lenders. To become eligible to participate in Title IV programs, each type of servicer must work with the school or lender they represent and follow the respective process for that type of organization.

Although the enrollment process is unique for each type of Title IV Trading Partner, the outcome of a successful enrollment is the same, in that a Trading Partner is designated as eligible to participate in Title IV programs.

Step 2: Participation Management

The second step in the FSA enrollment process is to complete the Student Aid Internet Gateway (SAIG) enrollment process via the Participation Management (PM) system. SAIG provides telecommunications support for the delivery and administration of Title IV programs via the Internet. Enrollment in PM/SAIG is limited to postsecondary schools that participate in federal student financial aid programs, third party servicers that provide services to these schools, guarantee agencies for student loans, and lenders for the Federal Family Education Loan (FFEL) program. Currently, six systems utilize the SAIG enrollment process as a means to set up destination point administrator (DPA) and destination point identifiers. The destination point



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identifiers are called "TG Numbers" (for historical reasons) and are used to identify destinations for exchange information between FSA systems and Trading Partners. These systems include: Direct Loan Servicing System (DLSS), Central Processing System (CPS), electronic Campus-Based System (eCB), National Student Loan Data System (NSLDS), Lender Reporting System (LARS) and Common Origination and Disbursement (COD). It should be noted that COD also has a separate enrollment process to permit exchange of information without having to go through SAIG.

Step 3: Individual System Enrollment

In order to sign up for the remaining 11 FSA systems, Trading Partners must utilize the individual registration processes developed by each individual system. Since no FSA standard has been developed to control this process, each system process is separate and unique. Often, Trading Partner data previously provided and stored in other FSA systems is required for enrollment in the individual FSA systems. A common enrollment process across all FSA systems would greatly simplify system enrollment and ease the burden on both the Trading Partners and FSA.



2.5 Detailed Process Flows – Enrollment

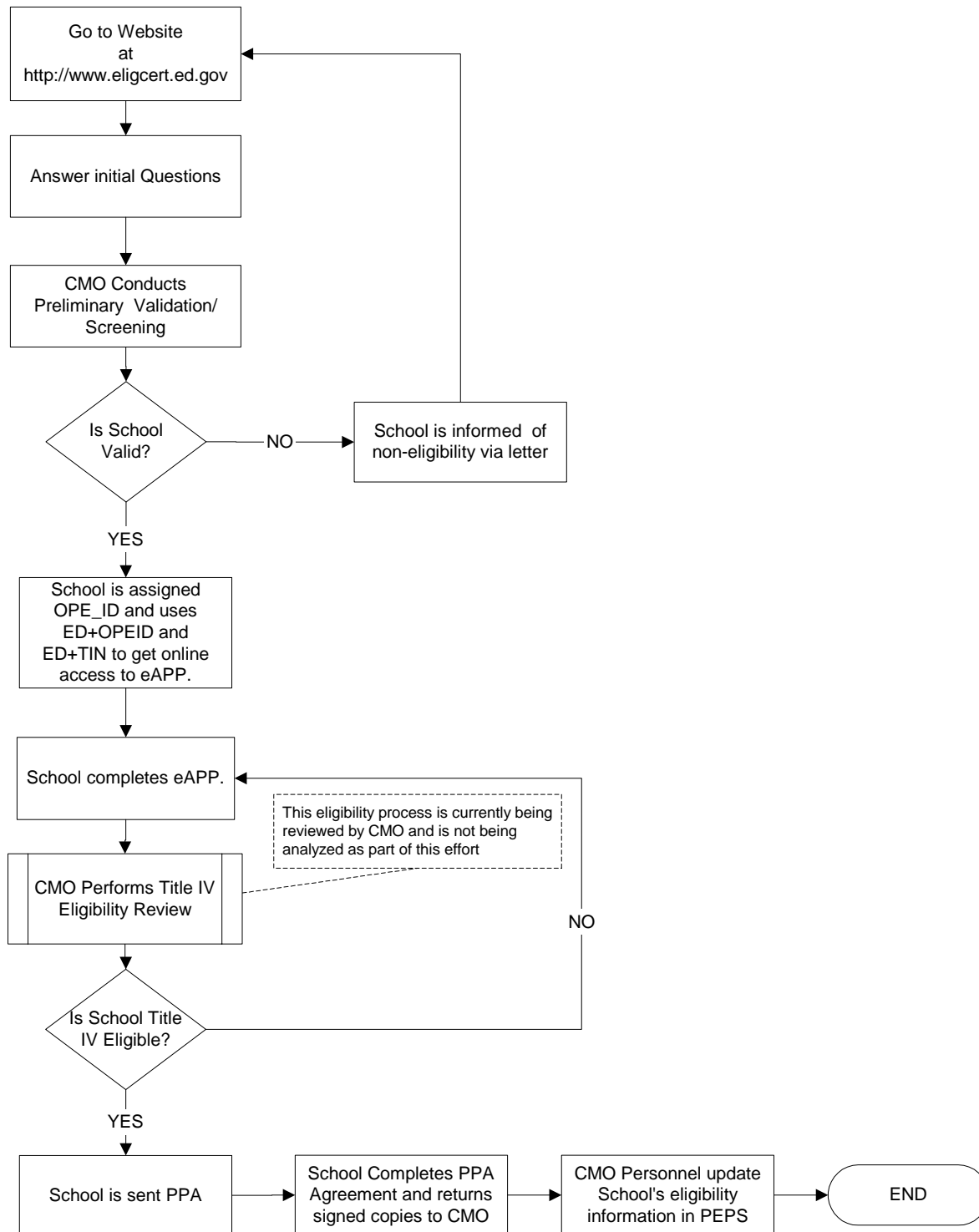
This section contains the detailed process flows that were developed and analyzed as part of the current state analysis for enrollment. Detailed process flows were developed for each Trading Partner system shown in Figure 2.3 for step 1 and step 2 of the FSA enrollment process. Representative process flows were developed for step 3. These process flows cover over 80% percent of the Trading Partner enrollment processes that currently exist at FSA. Additional process flows for individual systems/programs will be developed as needed during subsequent phases of this effort. Figure 2.4 provides a high-level summary of the detailed enrollment processes that were developed.

	Title IV Enrollment	Participation Management	Other Systems
Schools			
Flow #1 - 2.5.1	X		
Flow #2 - 2.5.5		X	
Flow #3 - 2.5.6			X
Flow # 4 - 2.5.7			X
Flow #5 - 2.5.8			X
Lenders			
Flow #1 - 2.5.2	X		
Flow #2 - 2.5.5		X	
Flow #3 - 2.5.8			X
GA's			
Flow #1 - 2.5.3	X		
Flow #2 - 2.5.5		X	
Flow #3 - 2.5.8			X
State Agencies			
Flow #1 - 2.5.4	X		
Flow #2 - 2.5.5		X	
Flow #3 - 2.5.8			X

Figure 2.4 – Detailed Process Flows - Enrollment

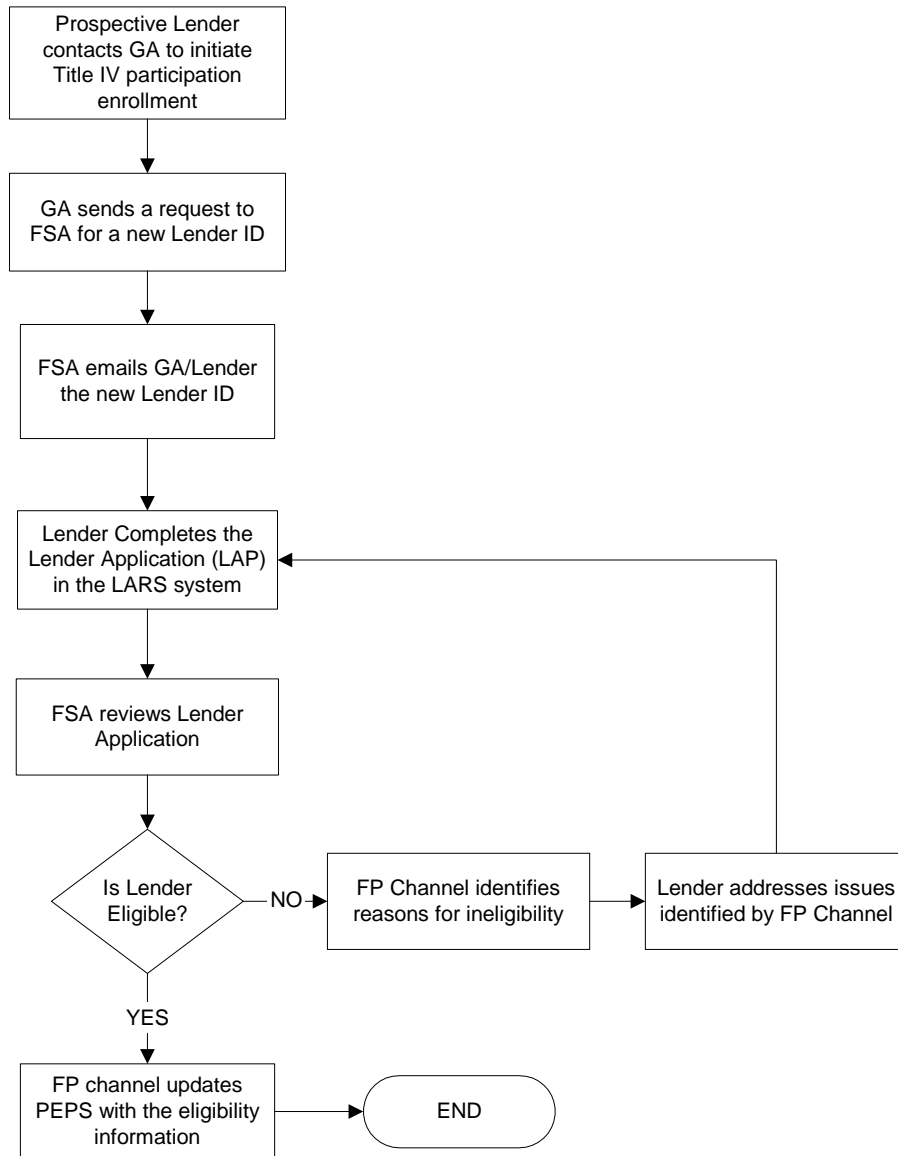


2.5.1 Process Flow – School Title IV Enrollment



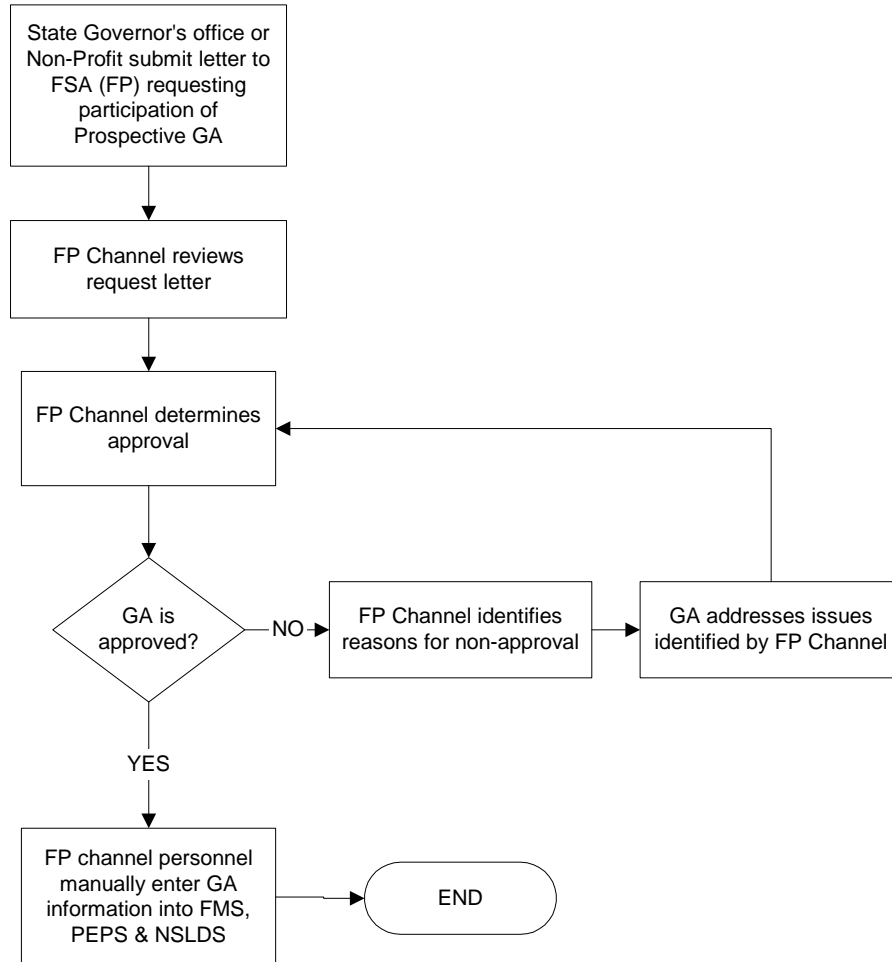


2.5.2 Process Flow – Lender Title IV Enrollment



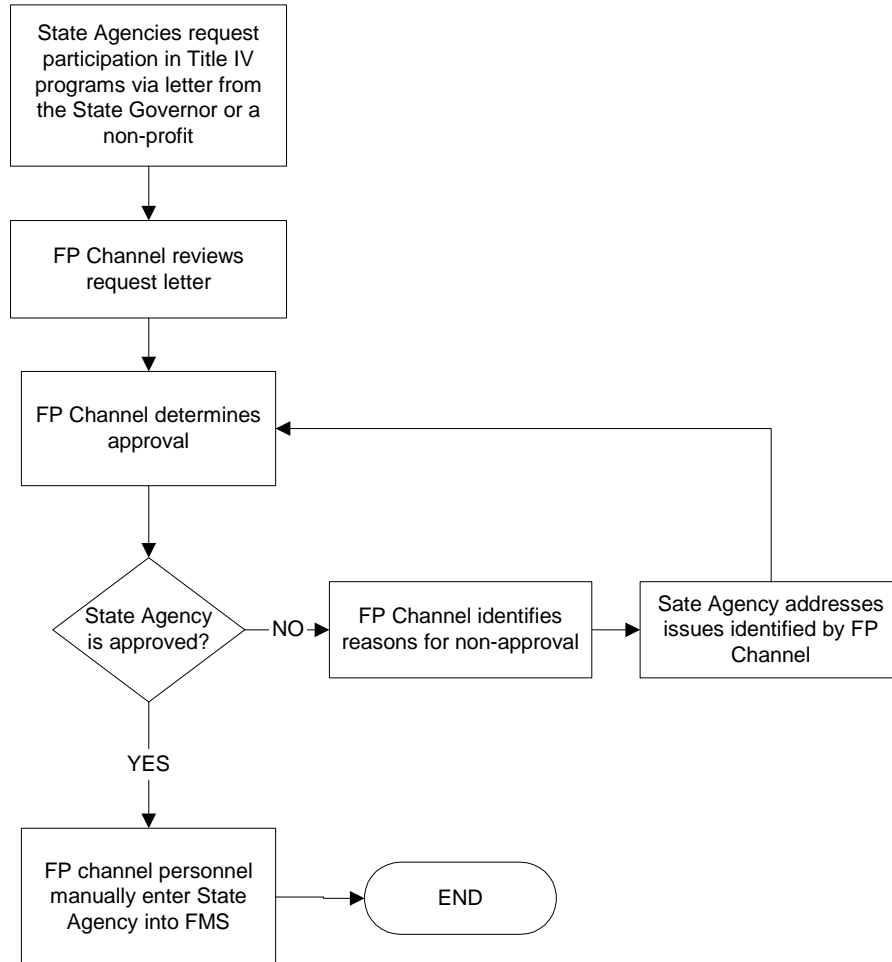


2.5.3 Process Flow – Title IV Guarantee Agency Enrollment





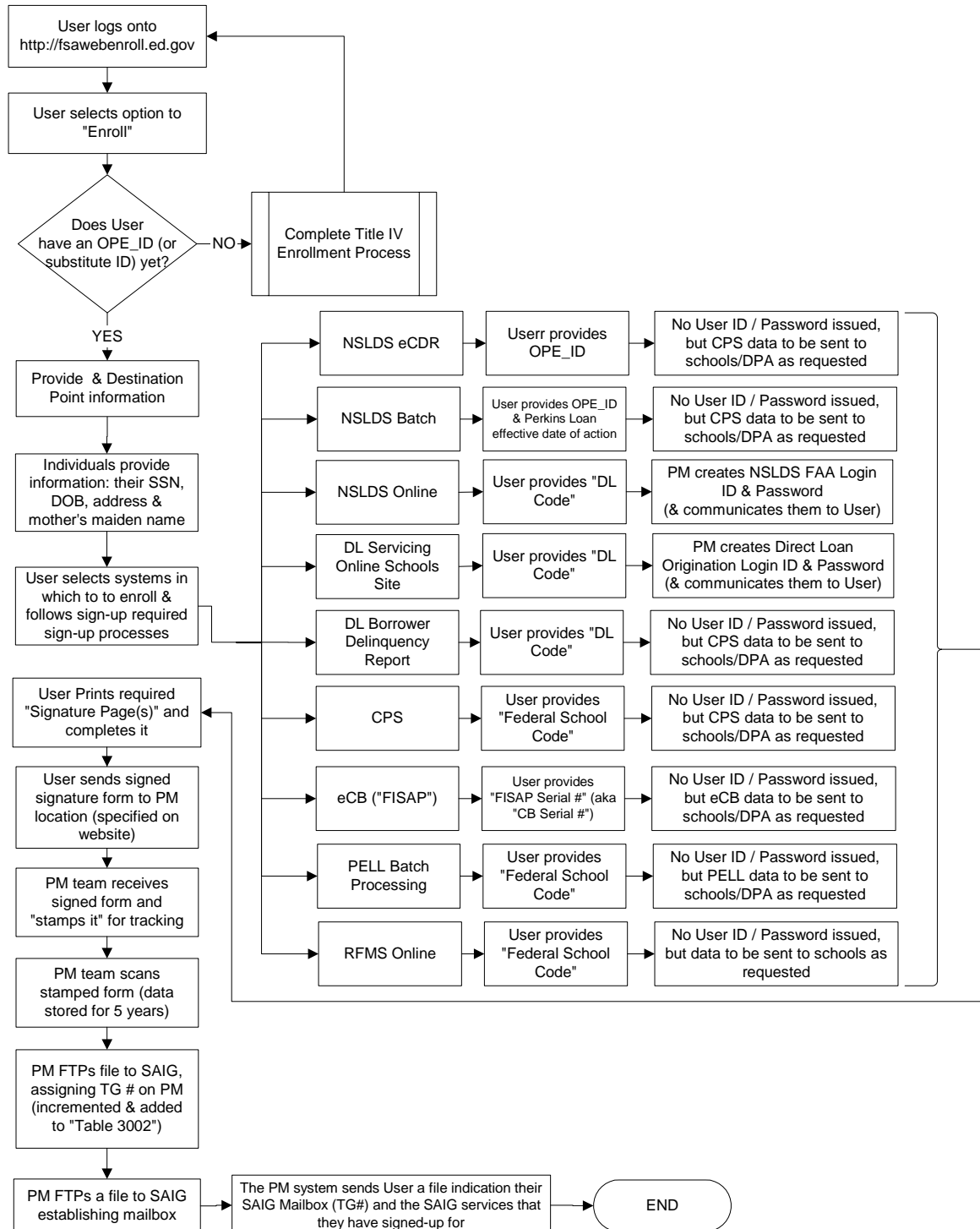
2.5.4 Process Flow – Title IV State Agency Enrollment





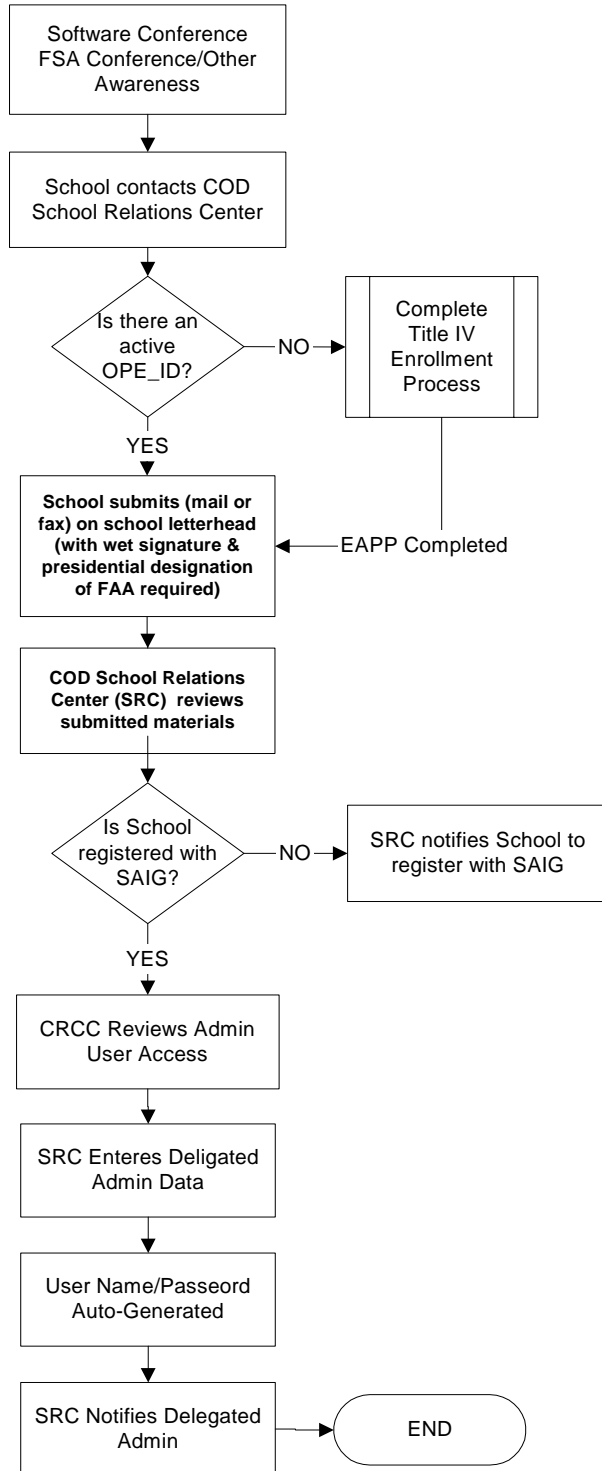
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2.5.5 Process Flow – Participation Management Trading Partner Enrollment





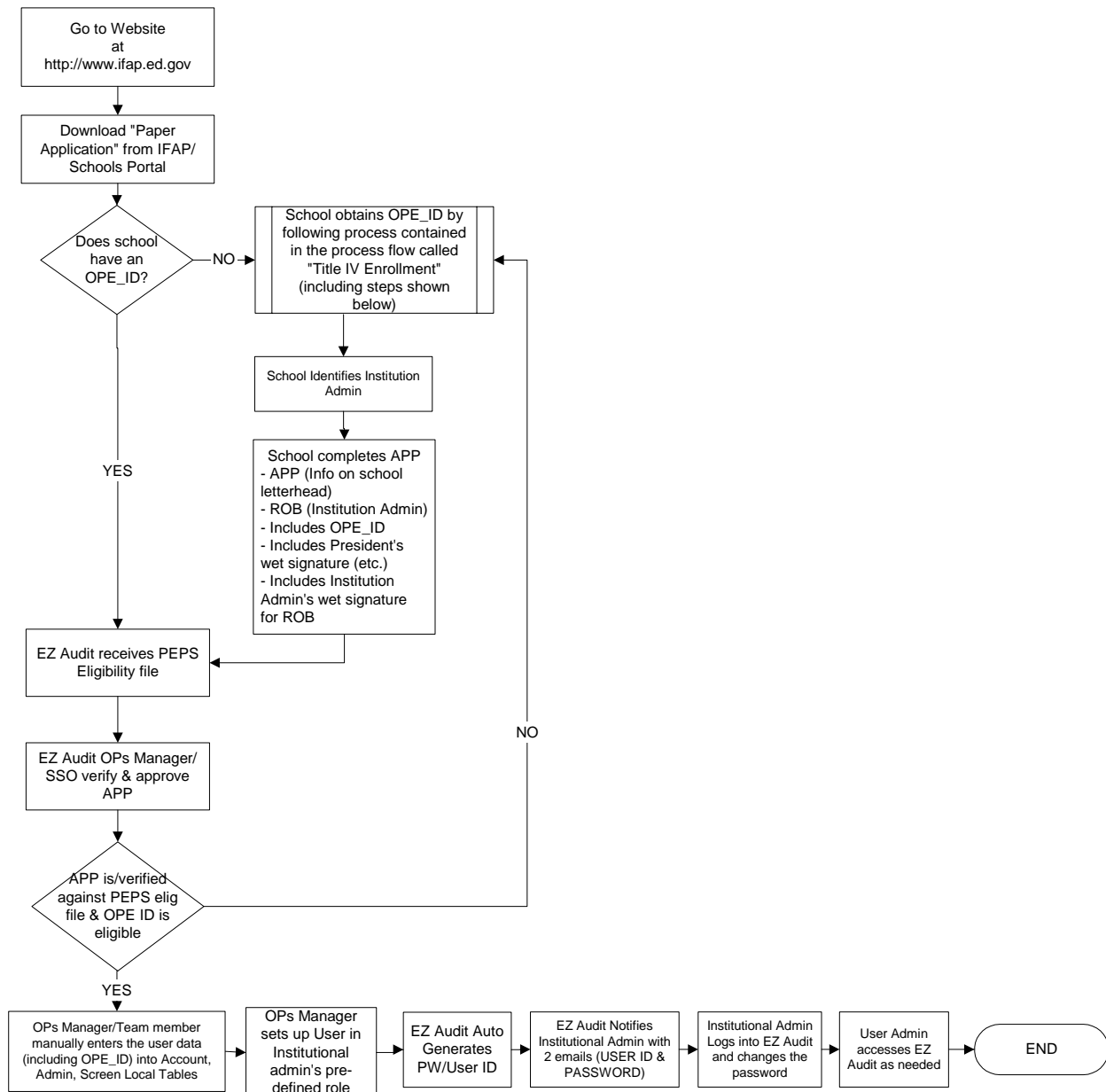
2.5.6 Process Flow – COD Enrollment (School)





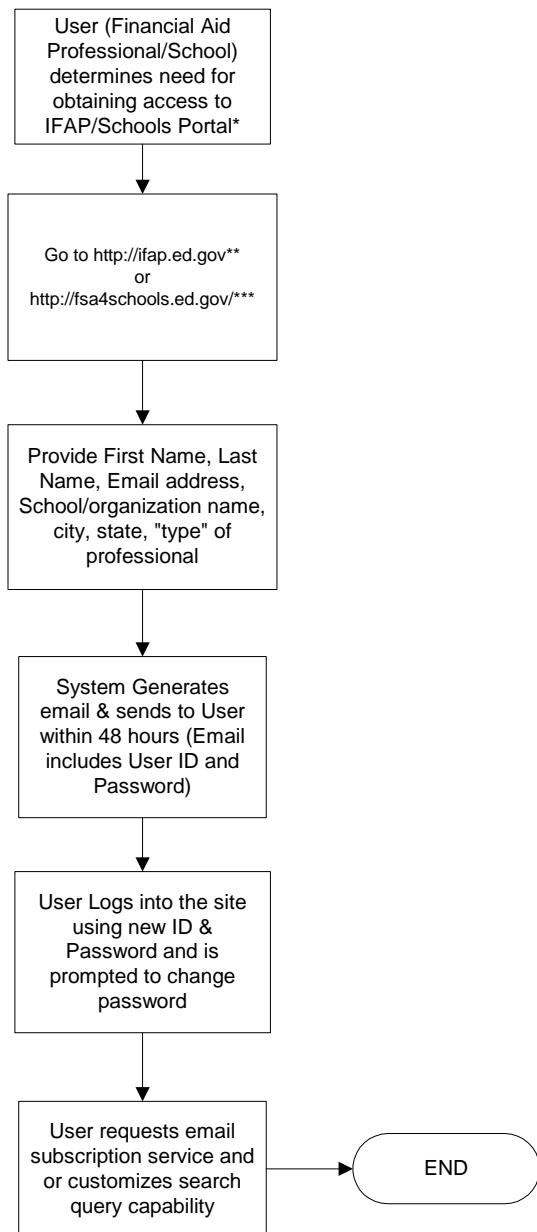
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2.5.7 Process Flow – EZ Audit Enrollment (School)





2.5.8 Process Flow – IFAP / Schools Portal Enrollment (All Trading Partners)



* IFAP/Schools Portal are open/public websites. Enrollment in IFAP/Schools Portal is only necessary for Financial Aid Professionals who require specific enablement to participate in email subscription service, and/or support customized search query development.

** <http://ifap.ed.gov/IFAPWebApp/newLogonMemberServicesPag.jsp>

*** <http://fsa4schools.ed.gov/SCHOOLSWebApp/index.jsp> (select a sign-up option)



3 Business Objectives

3.1 Introduction

Business Objectives are a statement of purpose to help the enterprise define a vision for future efforts. They provide high-level direction and standards for complex enterprise issues. Business Objectives are not high-level requirements and do not specify a design or dictate a solution.

High-level requirements are created in the planning stage of a project and provide more detail than business objectives. High-level requirements are not detailed requirements or a design. High-level requirements also do not dictate a solution but provide examples and clarifications for the business objective. More detailed requirements must be identified before beginning detailed design activities.

3.2 Activities

An iterative approach was employed to identify and validate the enrollment and access management business objectives. Sample business objectives were initially created based on the individual information-gathering sessions held with the Core Team members and system owners. Those Business Objectives were organized into the Business Integration Group (BIG) Vision Framework structure. An example of the BIG Vision Framework is shown in Appendix D. Three group meetings were held with representatives from the Delivery and Eligibility, Servicing, and Applications areas to identify, review, validate, and document enrollment and access management business objectives. Additional detail on these meetings is in Appendix B – Meeting Summaries. After each meeting the Business Objectives were summarized and analyzed. The revised business objectives were discussed and validated with the Core Team.



Data Strategy Enterprise-Wide Enrollment and Access Management Business Objectives and High-Level Requirements

3.3 Business Objective Framework

3.3.1 Description

The Enrollment and Access Management Vision Framework below was used to group and examine business objectives and high-level requirements. This framework is based on the Business Integration Group (BIG) Vision Framework. While the enterprise vision framework was used to create this structure, the Enrollment and Access Management Business Objectives are at a much more detailed level specific to tools, processes, and functional areas for enrollment and access management. Please see section 3.6 for a mapping of Enrollment and Access Management Business Objectives to the BIG Vision Framework objectives.

Core Business Outcomes				
Provide Easier Access to Make it Easier for Our Customers to do Business With Us		Maintain Right & Effective Levels of Oversight Through Combination of Enhanced Tools & Customer Self-Monitoring	Run the Business to Enable Right Actions, Right Transactions to the Right People	
A. "Easier Access"		B. "Effective Oversight"	C. "Right Transactions to the Right People"	
Core Business Enablers	Support Effective & Informed Decision Making by Making the Right Information Available at the Right Time to the Right People	A1.1 - Focus on registration processes and access decisions at the enterprise level instead of on a per system basis.	B1.1 - Adopt a uniform decision making process for evaluating users requesting access to FSA systems.	C1.1 - Facilitate access to sets of data at the enterprise level.
	1. "Effective Decision Making"			
	Provide the Right Security, Tools, Systems, Architecture & Technology to Enable the Business to Achieve its Outcomes	A2.1 - Manage enrollment and access privileges at the enterprise level.	B2.1 - Provide effective oversight of user access to FSA systems.	C2.1 - Create enterprise policy and standards for enrollment and access management.
	2. "Right Tools & Technology"	A2.2 - Improve self-service capabilities.		C2.2 - Maintain security of FSA systems.
		A2.3 - Balance easier access and system security.		C2.3 - Provide users with access to FSA systems appropriate for their job function.
		A2.4 - The enrollment and access solution should be flexible enough to support the requirements of current and future FSA systems.		
		A2.5 - Allow users to customize their experience with FSA systems.		
Improve & Integrate Business Processes Into Delivery Solutions	A3.1 - Streamline enrollment and access management for Trading Partner services.	B3.1 - Meet FSA regulatory compliance requirements.	C3.1 - Provide effective training and customer support across FSA systems.	
3. "Improve Business Process"			C3.2 - Adopt enrollment and access management policies that improve business processes.	

Figure 3.1 – Enrollment and Access Management Vision Framework

	Enrollment and Access Management Business Objective
	Access Management Only Business Objective
	Cross-Team Business Objective



3.3.2 Framework Sector Definitions

A1: "Easier Access" and "Effective Decision Making"

Sector A1 captures business objectives that relate to the BIG Integration Vision Framework outcomes "Provide Easier Access to Make it Easier for Our Customers to do Business With Us" and "Support Effective & Informed Decision Making by Making the Right Information Available at the Right Time to the Right People."

A2: "Easier Access" and "Right Tools and Technology"

Sector A2 captures business objectives that relate to the BIG Integration Vision Framework outcomes "Provide Easier Access to Make it Easier for Our Customers to do Business With Us" and "Provide the Right Security, Tools, Systems, Architecture & Technology to Enable the Business to Achieve its Outcomes."

A3: "Easier Access" and "Improve and Integrate Business Processes"

Sector A3 captures business objectives that relate to the BIG Integration Vision Framework outcomes "Provide Easier Access to Make it Easier for Our Customers to do Business With Us" and "Improve & Integrate Business Processes Into Delivery Solutions."

B1: "Effective Oversight" and "Effective Decision Making"

Sector B1 captures business objectives that relate to the BIG Integration Vision Framework outcomes "Maintain Right & Effective Levels of Oversight Through Combination of Enhanced Tools & Customer Self-Monitoring" and "Support Effective & Informed Decision Making by Making the Right Information Available at the Right Time to the Right People."

B2: "Effective Oversight" and "Right Tools and Technology"

Sector B2 captures business objectives that relate to the BIG Integration Vision Framework outcomes "Maintain Right & Effective Levels of Oversight Through Combination of Enhanced Tools & Customer Self-Monitoring" and "Provide the Right Security, Tools, Systems, Architecture & Technology to Enable the Business to Achieve its Outcomes."

B3: "Effective Oversight" and "Improve and Integrate Business Processes"

Sector B3 captures business objectives that relate to the BIG Integration Vision Framework outcomes "Maintain Right & Effective Levels of Oversight Through Combination of Enhanced Tools & Customer Self-Monitoring" and "Improve & Integrate Business Processes Into Delivery Solutions."



Data Strategy Enterprise-Wide Enrollment and Access Management Business Objectives and High-Level Requirements

C1: "Right Transactions to the Right People" and "Effective Decision Making"

Sector C1 captures business objectives that relate to the BIG Integration Vision Framework outcomes "Run the Business to Enable Right Actions, Right Transactions to the Right People" and "Support Effective & Informed Decision Making by Making the Right Information Available at the Right Time to the Right People."

C2: "Right Transactions to the Right People" and "Right Tools and Technology"

Sector C2 captures business objectives that relate to the BIG Integration Vision Framework outcomes "Run the Business to Enable Right Actions, Right Transactions to the Right People" and "Provide the Right Security, Tools, Systems, Architecture & Technology to Enable the Business to Achieve its Outcomes."

C3: "Right Transactions to the Right People" and "Improve and Integrate Business Processes"

Sector C3 captures business objectives that relate to the BIG Integration Vision Framework outcomes "Run the Business to Enable Right Actions, Right Transactions to the Right People" and "Improve & Integrate Business Processes Into Delivery Solutions."



3.4 Business Objectives

Listed below is the entire set of the Enrollment and Access Management Business Objectives:

Number	Business Objective
A1.1	Focus on registration processes and access decisions at the enterprise level instead of on a per system basis.
A2.1	Manage enrollment and access privileges at the enterprise level.
A2.2	Improve self-service capabilities.
A2.3	Balance easier access and system security.
A2.4	The enrollment and access solution should be flexible enough to support the requirements of current and future FSA systems.
A2.5	Allow users to customize their experience with FSA systems.
A3.1	Streamline enrollment and access management for Trading Partner services.
B1.1	Adopt a uniform decision making process for evaluating users requesting access to FSA systems.
B2.1	Provide effective oversight of user access to FSA systems.
B3.1	Meet FSA regulatory compliance requirements.
C1.1	Facilitate access to sets of data at the enterprise level.
C2.1	Create enterprise policy and standards for enrollment and access management.
C2.2	Maintain security of FSA systems.
C2.3	Provide users with access to FSA systems appropriate for their job function.
C3.1	Provide effective training and customer support across FSA systems.
C3.2	Adopt enrollment and access management policies that improve business processes.

Figure 3.2 – Enrollment and Access Management Business Objectives



3.5 Business Objectives Detail

For ease of reference, the business objectives and high-level requirement details are documented in a uniform format. The fields of the detail matrix are defined in the following example:

Scope:	This field indicates whether the business objective relates to Enrollment, Access Management, or both.	
Identifier/Title:	XX.X - Statement of business objective.	
Description:	Provides full description and supporting details for the business objective.	
High-Level Requirements:	XX.X.1	High-level requirement #1 – Statement of high-level requirement.
	XX.X.2	High-level requirement #2 – Statement of additional requirements, etc.
Additional Information	Provides supplementary details, assumptions, examples, and business context for the high-level requirements.	

This document presents business objective and high-level requirement details for FSA enrollment and is meant as a companion deliverable to 123.1.27 Access Management Business Objectives and High-Level Requirements. For the reader's convenience, the enrollment business objective deliverable contains placeholders and short descriptions for access management business objectives. However, additional detail on Access Management Business Objectives and High Level Requirements is located in Deliverable 123.1.27.



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Enrollment and Access Management
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3.5.1 Business Objective A1.1 – “Enterprise process focus”

Scope:	Enrollment and Access Management	
Identifier/Title:	A1.1 - Focus on registration processes and access decisions at the enterprise level instead of on a per system basis.	
Description:	<p>Currently, registration processes and access decisions for FSA systems are inconsistent across systems. The intent of this objective is to provide an enterprise view of the registration and access management processes, instead of having different processes for different systems.</p> <p>Consolidation of the decision-making processes for registration and user access will help provide a more consistent application of FSA policies, streamline the registration and access processes for Trading Partners, and improve the ability of Trading Partners to quickly gain access to the FSA services they need.</p>	
High-Level Requirements:	A1.1.1	Support making access decisions at the enterprise level instead of by system.
	A1.1.2	Take into account unique requirements of foreign schools when making decisions about registration and access.
	A1.1.3	Facilitate decision making with an effective registration and access approval workflow process.
Additional Information	<p>Currently access and registration decisions are at the system level. The intent of this requirement is to standardize these processes across the enterprise.</p> <p>A1.1.1 – FSA has an Information Technology Security and Privacy Policy that defines high-level requirements for access to FSA systems. However, it does not provide standards or guidelines at the level of individual systems, so each system manager or security administrator may apply different procedures for making decisions about who should have access to the systems they control. The intent of this requirement is that FSA should have a set of enterprise guidelines to standardize processes for making and documenting decisions about institution or individual access.</p> <p>A1.1.2 – There are unique requirements for the registration and granting of access to foreign schools. FSA Enrollment and Access Management systems should provide for consistent application of these requirements across all FSA systems.</p> <p>A1.1.3 – Decision-making procedures currently involve a high degree of manual input, manual processing, and variability between systems. A standardized process should be created to improve the uniformity and</p>	



Data Strategy Enterprise-Wide Enrollment and Access Management Business Objectives and High-Level Requirements

	tracking of enrollment and access management. A workflow process would provide uniform controls to improve documentation and communication of process steps, improving the efficiency and consistency of decisions and providing tools for effectively reporting status to FSA and to end users.
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Business Objectives and High-Level Requirements**

3.5.2 Business Objective A2.1 – “Manage across systems”

Scope:	Enrollment and Access Management	
Identifier/Title:	A2.1 - Manage enrollment and access privileges at the enterprise level.	
Description:	Management of enrollment and access privileges includes administrative and reporting tasks associated with registration of schools and granting access to FSA systems. Currently, most administrative processes take place on a system-by-system basis. Enterprise management of these processes will improve their efficiency and consistency.	
High-Level Requirements:	A2.1.01	Administer access privileges at the enterprise level.
	A2.1.02	Enable integration across business processes to support use of a single User ID and password.
	A2.1.03	Ensure that each User ID is associated with a single user or entity.
	A2.1.04	Support single sign-on functions.
	A2.1.05	Support multiple user sessions.
	A2.1.06	Provide methods to enable and disable user access at specified begin and end dates.
	A2.1.07	Provide cost effective tools for managing registration and access.
	A2.1.08	Provide, where possible, automated tools for enrollment and access management.
	A2.1.09	Support unique requirements associated with enrollment and access management of foreign schools.
	A2.1.10	Provide workflow tools that support registration and access approval processes.
	A2.1.11	Effectively terminate access rights across systems.
	A2.1.12	Provide a method for easy password reset.
Additional Information	<p>Effective enterprise management of enrollment, registration, and access will require tools for the effective collection, communication, and processing of institution and user information. Required administrative functions include collection of information needed to register users and set up user accounts on FSA systems, initial configuration of user accounts, modification of accounts when access needs change, termination of users that no longer need access, and administrative tasks to configure access control systems.</p> <p>A.2.1.01 – Enterprise administration of access privileges implies two</p>	



Data Strategy Enterprise-Wide Enrollment and Access Management Business Objectives and High-Level Requirements

	<p>major capabilities: a centralized system or tool that can be used to configure access across multiple FSA systems, and a centralized means of viewing or displaying access rights across the enterprise.</p> <p>A2.1.02 – Many systems currently have their own standards for creating user IDs and managing user passwords. Consolidation of User ID and password requirements across FSA systems will simplify the sign-on process for users and promote more consistent access requirements.</p> <p>A2.1.03 – Access management tools should help enforce FSA requirements that each user account is clearly associated with a single user to provide accountability for user actions. Currently school users are thought to share User IDs and passwords.</p> <p>A2.1.04 – “Single Sign-on” (SSO) promotes easier access by reducing the number of User IDs/passwords a user must manage. However, the term “single sign-on” may be misleading. It implies that a user would have access to all their applications after logging in once. “Simplified Sign-on” may be more accurate, because the single sign-on function will typically consolidate access for a group of related applications. As a practical concern, “Single Sign-on” is also misleading because technical limitations usually restrict sign-on consolidation to a set of related systems, such as web applications available within a single organization.</p> <p>Simplified Sign-on can take several forms, including:</p> <ul style="list-style-type: none">• integrating application authentication mechanisms• creating a single portal that provides access for related applications• synchronization of passwords across multiple systems• a combination of these methods. <p>Additional analysis of the specific requirements for simplifying sign-on and options to achieve it will take place during the High-Level Design phase of the Enrollment and Access Management effort.</p> <p>A2.1.05 –This requirement refers to conducting multiple online sessions simultaneously, without having to log out and log back in to switch back and forth between systems. This could involve features that either allow simultaneous access to separate applications that must be used together, or to have more than one active session in a single application.</p> <p>A2.1.06 – The ability to automatically configure access to begin and end on specified dates provides better control over access and decreases delays associated with granting access to new workers. It also facilitates</p>
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Data Strategy Enterprise-Wide Enrollment and Access Management Business Objectives and High-Level Requirements

	<p>the removal of access when no longer required. For example, a contractor user account could be set to begin on the first day of work, and to end on the date the contract is complete.</p> <p>A2.1.07 – Tools implemented for managing enrollment and access management must provide benefits that exceed their cost to acquire, install, and operate. Selection of tools should include analysis of expected savings and efficiencies as part of the business case justification for deployment.</p> <p>A2.1.08 – When appropriate, automated tools that can be used across the enterprise should be preferred for managing registration and access, in preference to manual processes or separate tools that provide management functions for single systems.</p> <p>A2.1.09 – Management tools for enrollment and access should be configurable for the unique information and processing requirements of foreign schools. Additional information may need to be gathered for foreign schools, and additional checks or validation steps may be required. For example, on the first page of the eApp, users must enter letters plus their country. Foreign schools also use their mail code or country name as their initial password. However, non-foreign schools use their Tax Payer ID Number (TIN).</p> <p>A2.1.10 – Workflow tools can be used to support registration and access approval processes. A consideration during the design phase will be to analyze the relative advantages of special-purpose workflow tools, as opposed to using more general workflow systems that may provide enterprise-processing functions.</p> <p>A2.1.11 - Provide both policies and tools that effectively terminate access rights for individual users and groups of users when no longer needed. To insure adequate control across all FSA systems, tools and procedures should provide for automated notification across the enterprise of users that should be terminated.</p> <p>A2.1.12 – Provide efficient and consistent methods that allow reset of a user's password for FSA systems. Password reset requests represent a significant fraction of Help Desk calls. Options for password resets include self-service systems that use a challenge-response mechanism to authenticate the user, or a system that allows rapid reset of passwords by Help Desk staff across multiple FSA systems without requiring interaction with individual systems.</p>
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Data Strategy Enterprise-Wide Enrollment and Access Management Business Objectives and High-Level Requirements

3.5.3 Business Objective A2.2 – “Self-service capabilities”

Scope:	Enrollment and Access Management	
Identifier/Title:	A2.2 - Improve self-service capabilities.	
Description:	As part of the overall FSA effort to improve access to FSA systems and increase efficiency of FSA services for Trading Partners, enrollment and access management systems should provide functions that allow users to conduct appropriate transactions or obtain information on their own, without having to contact FSA.	
High-Level Requirements:	A2.2.1	Support self-service administration of user access by the Trading Partner.
	A2.2.2	Provide institution enrollment status via the Web.
	A2.2.3	Provide users a view of their access status.
Additional Information	A2.2.1 - Put individual decisions about access in hands of Trading Partner administrators who have the best knowledge of users and their access requirements. Provide a method for delegating security administration to Trading Partners.	



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3.5.4 Business Objective A2.3 - "Balance access and security"

Scope:	Access Management
Identifier/Title:	A2.3 - Balance easier access and system security.
Description:	Refer to Deliverable 123.1.27 Access Management Business Objectives and High-Level Requirements.



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3.5.5 Business Objective A2.4 – “Flexibility for future requirements”

Scope:	Enrollment and Access Management	
Identifier/Title:	A2.4 - The enrollment and access solution should be flexible enough to support the requirements of current and future FSA systems.	
Description:	Changes are expected in FSA systems, processes, and the technology used to deploy FSA services. FSA Enrollment and Access Management systems should be flexible enough to account for anticipated changes in FSA systems and processes.	
High-Level Requirements:	A2.4.1	Provide flexible provisioning services for existing and future systems.
	A2.4.2	Support future system consolidation efforts.
	A2.4.3	Support easier access management for legacy systems with minimal or no rework.
	A2.4.4	Support simplified user identification/certification between FSA and other government agencies.
	A2.4.5	System needs to support adoption of e-signatures.
	A2.4.6	Provide flexibility to accommodate changes in business process, regulations, and statutes.
Additional Information	<p>A2.4.1 – Provisioning systems to configure user accounts and set up access need to function with existing FSA systems, including both web applications and mainframe or legacy systems. Provisioning systems should be flexible enough to provide integration pathways for new FSA systems or applications.</p> <p>A2.4.2 – FSA is in the process of planning system consolidations, and future consolidation efforts can be anticipated. Enrollment and Access Management solutions should provide migration pathways for enrollment and access data, and for integrating the consolidated systems into the enrollment and access management processes.</p> <p>A2.4.3 – This requirement is related to A2.4.1, but specifies that integration with legacy systems should not require changing legacy applications. Enrollment and Access Management tools should provide interfaces that communicate with legacy systems through existing communications protocols.</p> <p>A2.4.4 – Enrollment and Access Management systems should support sharing user authentication credentials across FSA environments and with other Federal agencies. Efforts that should be considered in system design include Federal initiatives such as e-Authentication, and</p>	



Data Strategy Enterprise-Wide Enrollment and Access Management Business Objectives and High-Level Requirements

	<p>commercial standards that implement Transitive Trust relationships to allow third-party authentication of users.</p> <p>A2.4.5 – Online signatures are used in a limited fashion by FSA systems now. The expectation is that more transactions will be configured to use online signatures, and that new e-Signature methods and technologies will be developed. Enrollment and Access Management systems should provide flexibility to integrate with developing e-Signature standards.</p> <p>A2.4.6 – Enrollment and Access Management systems should provide flexible and configurable functions to account for changes in technology, FSA business processes, and regulatory requirements. Since security and privacy standards and practices continue to evolve at the Federal and local levels, systems should implement industry standards that will allow reasonable adaptations to change without requiring major reengineering.</p>
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Data Strategy Enterprise-Wide Enrollment and Access Management Business Objectives and High-Level Requirements

3.5.6 Business Objective A2.5 – “User customization”

Scope:	Data Strategy	
Identifier/Title:	A2.5 - Allow users to customize their experience with FSA systems.	
Description:	Users should be able to customize the appearance and functionality of FSA systems to adapt to the way they work. This objective is not limited to Enrollment and Access Management systems. The scope of this objective extends across the entire Data Strategy project, as well as any FSA effort to develop new systems or applications for Trading Partners.	
High-Level Requirements:	A2.5.1	N/A
Additional Information	<p>Several potential customization requirements were identified, as outline below. Not all of these apply strictly to Enrollment and Access Management systems, but they are captured here to insure they are not lost.</p> <p>Types of suggested customization includes:</p> <ul style="list-style-type: none">• Allow users to change or filter functions, options, or links that appear on a user interface• Customize the users’ home page or initial view of the system upon login.• Have the ability to inherit customization settings from existing settings.• Tie customization and personalization functions to FSA portals, so that if work has been completed through the portal it doesn’t have to be repeated.• Collect customer demographic data that will allow Customer Service to better help customers.• Have the ability to “push” content to users when appropriate. For example, when users need to receive announcements or other information they do not know they need.• Provide proactive calendar views of deadlines from an enterprise perspective. For example, inform users of deadlines or milestones that can aid business process workflow.	



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3.5.7 Business Objective A3.1 – “Streamline enrollment and registration”

Scope:	Enrollment and Access Management	
Identifier/Title:	A3.1 - Streamline enrollment and access management for Trading Partner services.	
Description:	Simplify, consolidate, and integrate enrollment and access management processes to provide faster and more efficient services to Trading Partners.	
High-Level Requirements:	A3.1.1	Consolidate duplicated system enrollment processes.
	A3.1.2	Provide a common collection point and storage location for Trading Partner data.
	A3.1.3	Share information across FSA systems throughout the Student Aid Lifecycle.
	A3.1.4	Provide a method for viewing enrollment and access management data from a single location.
	A3.1.5	Minimize the number of initial contact points for the system enrollment process and for obtaining user access to systems.
	A3.1.6	Support a common method for communicating information about enrollment and access management to users.
Additional Information	<p>A3.1.1 – There are several processes and variant steps for collecting information and verifying Trading Partner eligibility. Examples of variance and inconsistencies in existing processes are explained in Section 2 of this document.</p> <p>A3.1.2 – Information collected during the Trading Partner enrollment process is collected and stored in various locations. This requirement would insure that a common collection point and storage mechanism is available to simplify enrollment processing. Several types of institutional data must be collected. In addition to identifying information, the system will need to gather, analyze , and maintain information about technology capabilities, such as whether the user will send files or will simply access FSA data.</p> <p>A3.1.3 – Current enrollment processes require repetitive steps and data checks because many systems are isolated. This requirement would promote redesigned processes that ‘push’ institution data and eligibility status to the next step in an enterprise process, rather than requiring each system to perform its own validation steps independently.</p>	



Data Strategy Enterprise-Wide Enrollment and Access Management Business Objectives and High-Level Requirements

	A3.1.5 – There are currently a variety of entry points for initiating the enrollment and access management processes. Single contact point for institutions and individual users will simplify these processes for users, and will provide better opportunities to communicate enrollment and access requirements.
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Data Strategy Enterprise-Wide Enrollment and Access Management Business Objectives and High-Level Requirements

3.5.8 Business Objective B1.1 – “Uniform process for access decisions”

Scope:	Access Management
Identifier/Title:	B1.1 - Adopt a uniform decision making process for evaluating users requesting access to FSA systems.
Description:	Refer to Deliverable 123.1.27 Access Management Business Objectives and High-Level Requirements.



Data Strategy Enterprise-Wide Enrollment and Access Management Business Objectives and High-Level Requirements

3.5.9 Business Objective B2.1 – “Audit user access”

Scope:	Access Management
Identifier/Title:	B2.1 - Provide effective oversight of user access to FSA systems.
Description:	Refer to Deliverable 123.1.27 Access Management Business Objectives and High-Level Requirements.



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3.5.10 Business Objective B3.1 – “Meet regulatory requirements”

Scope:	Enrollment and Access Management	
Identifier/Title:	B3.1 - Meet FSA regulatory compliance requirements.	
Description:	FSA systems operate in a complex federal government environment with numerous regulatory compliance and reporting requirements. (E.g. The Privacy Act of 1974, The Government Information Security Reform Act, U.S. Department of Education Information Technology Security Policy, etc.) This environment must be considered when designing and implementing an Enrollment and Access Management System.	
High-Level Requirements:	B3.1.1	Consider and incorporate external regulatory requirements affecting enrollment and access management.
	B3.1.2	Provide methods to track FSA compliance with regulations as they change.
Additional Information		



Data Strategy Enterprise-Wide Enrollment and Access Management Business Objectives and High-Level Requirements

3.5.11 Business Objective C1.1 – “Facilitate enterprise access to data”

Scope:	Data Strategy	
Identifier/Title:	C1.1 - Facilitate access to sets of data at the enterprise level.	
Description:	As discussed in Section 1.1 of this document, the Enrollment and Access Management is one team in the overall Data Strategy effort. While Enrollment and Access Management must support this business objective, the content of this objective is relates to the overall Data Strategy effort.	
High-Level Requirements:	C1.1.1	N/A
Additional Information	This business objective will be incorporated in other Data Strategy team efforts including the Data Framework and Tech Strategies projects. The High-Level Objective is to make decision support data accessible across the enterprise based on the question being asked or the business process, not based on the system of residence. Currently, a user may have to search several individual systems to get a complete picture of a borrower’s situation. Facilitating access to sets of data at the enterprise level and by business process will simplify these queries.	



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3.5.12 Business Objective C2.1 – “Enterprise policies and standards”

Scope:	Enrollment and Access Management	
Identifier/Title:	C2.1 - Create enterprise policy and standards for enrollment and access management.	
Description:	Automation and technical components are only as strong as the underlying enterprise policy and standards. Without fully defined and functioning procedures, no	
High-Level Requirements:	C2.1.1	Establish standards for initial identification of users.
	C2.1.2	Define enterprise user access privileges and roles.
	C2.1.3	Define delegated administration standards for Trading Partners.
	C2.1.4	Define enterprise standards for authentication of users.
	C2.1.5	Define signature standards for both wet signatures and on-line signatures.
	C2.1.6	Define standards for periodic review of access privileges across systems.
	C2.1.7	Define standards for periodic review of audit logs across systems.
	C2.1.8	Create enrollment and access management standards to define integration guidelines for future systems.
Additional Information	<p>C2.1.2 – This high-level requirement results from the need to define an enterprise standard that answers the following questions:</p> <ul style="list-style-type: none"> • Who needs access? • To what system does the user need access? • Why does the user need access? • When does the user need access? <p>C2.1.3 – For many organizations, delegated administration brings several benefits including increased security, more accountable users, and reduced administrative costs. At FSA, the standards that are established and relayed to the Trading Partners will be the foundation of any delegated administration system. An enrollment and access management system must support FSA policies regarding delegation of update ability from FSA to the Trading Partners.</p> <p>C2.1.5 – Consistent enterprise standards must be developed for instances when an e-signature is acceptable versus when a wet signature is required.</p>	



Data Strategy Enterprise-Wide Enrollment and Access Management Business Objectives and High-Level Requirements

	C2.1.8 – Changes made to enrollment and access management processes include the dynamic nature of systems development at FSA. Defining enrollment and access management standards for future integration efforts will facilitate future compliance.
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Data Strategy Enterprise-Wide Enrollment and Access Management Business Objectives and High-Level Requirements

3.5.13 Business Objective C2.2 - "Security of FSA systems"

Scope:	Access Management
Identifier/Title:	C2.2 - Maintain security of FSA systems.
Description:	Refer to Deliverable 123.1.27 Access Management Business Objectives and High-Level Requirements.



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3.5.14 Business Objective C2.3 – “Match access privileges to job functions”

Scope:	Access Management
Identifier/Title:	C2.3 - Provide users with access to FSA systems appropriate for their job function.
Description:	Refer to Deliverable 123.1.27 Access Management Business Objectives and High-Level Requirements.



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3.5.15 Business Objective C3.1 – “Effective training and customer support”

Scope:	Enrollment and Access Management	
Identifier/Title:	C3.1 - Provide effective training and customer support across FSA systems.	
Description:	Training and outreach to users is a cornerstone of enterprise security policy. Without proper communication, users could be equally unaware of the current policies and the possible disastrous results of not following the security policy.	
High-Level Requirements:	C3.1.1	Provide efficient help desk support for Trading Partners.
	C3.1.2	Provide common processes that allow help desk staff to handle cross-enterprise support issues.
	C3.1.3	Provide enrollment status to help desk staff for customer support.
	C3.1.4	Create effective communication and education channels for explaining the enrollment and access management process
	C3.1.5	Provide training on expected user responsibilities.
Additional Information	<p>C3.1.1 – An enterprise enrollment and access management system would need to provide a single point of contact for helpdesk and escalated administration issues.</p> <p>C3.1.2 – Due to the nature of an enterprise access management solution, the help desk staff would need to be familiar with all systems so that they could provide assistance to all users.</p> <p>C3.1.3 – Customer support users often feel frustration if they cannot ascertain a current status on their issue. A specific example of information a user might need is their enrollment status.</p> <p>C3.1.4 – Effective outreach simplifies the enrollment and access management process for the user. Examples of outreach for a user include a thorough explanation of how to obtain assistance, augmentation of on-line help, etc.</p> <p>C3.1.5 – Educating users on their responsibilities would reinforce the FSA Security Fundamental of Individual Accountability. In addition, having users sign-off on their responsibilities would provide a mechanism for further reinforcement of the security policies.</p>	



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3.5.16 Business Objective C3.1 – “Adopt policies to improve processes”

Scope:	Enrollment and Access Management	
Identifier/Title:	C3.2 Adopt enrollment and access management policies that improve business processes.	
Description:	In addition to the general enterprise balance of easier access and system security, it is important to keep FSA’s business processes in mind and look for ways to improve the flow of business through enrollment and access management.	
High-Level Requirements:	C3.2.1	Consider access needs during peak processing periods.
	C3.2.2	Provide for proactive notification of password expiration.
Additional Information	<p>C3.2.1 – While keeping unauthorized users out of FSA systems, FSA Security Policy needs to assist legitimate customers with their access. A common concern of legitimate users is that they will have trouble accessing systems during peak processing periods. During these particular periods, automatic password expiration could be suspended, as allowed by security policy.</p> <p>C3.2.2 – An additional method of keeping legitimate users knowledgeable of their current access is to proactively notify users of impending password expiration so they can rectify the situation before peak processing periods.</p>	



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3.6 Business Integration Group Vision Framework Cross Reference

	Enrollment and Access Management Business Objectives															
FSA BIG Vision Framework Objectives	A1.1 Enterprise process focus	A2.1 Manage across systems	A2.2 Self-service capabilities	A2.3 Balance access and security	A2.4 Flexibility for future requirements	A2.5 User customization	A3.1 Streamline enrollment and registration	B1.1 Uniform process for access decisions	B2.1 Audit user access	B3.1 Meet regulatory requirements	C1.1 Facilitate enterprise access to data	C2.1 Enterprise policies and standards	C2.2 Security of FSA systems	C2.3 Match access to job functions	C3.1 Effective training and support	C3.2 Adopt policies to improve processes
Easy customer access to required information throughout the delivery cycle	✓		✓			✓	✓								✓	
Self-service capabilities			✓											✓		
Automated business processes		✓					✓									
System-independent, integrated services to customers across the lifecycle		✓					✓							✓		
Standardized business processes	✓						✓								✓	✓
Easy and timely access to required oversight information								✓	✓						✓	
Efficient, automated oversight capabilities									✓							
Effective and balanced oversight									✓	✓						
Streamlined processes for routine oversight functions									✓							
Timely identification of risk-based non-compliance										✓						
Ability to proactively inform regulatory and statutory changes					✓					✓						
Actionable data to drive decision making											✓					
Deployment of technology solutions to meet program objectives		✓		✓	✓				✓			✓				✓
Clearly defined ownership and management of data														✓		
Consistent and accurate data across the enterprise											✓		✓	✓		
Maintain appropriately secured information				✓									✓	✓		
Flexible standards, technologies, services		✓			✓											✓
Tailored and relevant business services for all customer lifecycle activities							✓								✓	✓
Actionable information to inform business processes							✓								✓	
Effectively & efficiently manage organizational financial well-being		✓		✓												
Right skilled/trained workforce aligned with business processes															✓	
Maximize effectiveness of program based goals		✓														✓

Figure 3.3 - Cross reference of Enrollment and Access Management Objectives with related Business Integration Group (BIG) Vision Framework Objectives.



4 Conclusions and Next Steps

The Data Strategy Enrollment and Access Management task order started the process of reviewing and analyzing FSA's current processes for enrolling Trading Partners and for managing their access to FSA systems. The identification and documentation of FSA's Enrollment and Access Management Business Objectives and High-Level Requirements will be invaluable in the next phases of this effort.

This first phase of the Enrollment and Access Management task order produced the following guiding principles that will drive the high-level design:

- **Trading Partner Perception of FSA** - FSA enrollment and access management processes are a critical entry point for Trading Partners who wish to use FSA services. As initial point of contact, enrollment and access management processes greatly affect Trading Partner perceptions about the utility, usability, and customer service provided by FSA.
- **Phased Approach** - The 16 business objectives and 70 high-level requirements provide a broad perspective on required and desirable features of how FSA should interact with Trading Partners during the enrollment phase and during access management stages. They represent the most comprehensive set of views across FSA systems captured to date to describe how these processes should work. These objectives and requirements will provide an effective starting point for the analysis of solution options and development of high-level designs.
- **Access and Security** - FSA wishes to create more efficient and easier-to-use processes, but not at the expense of controls to protect FSA resources. Beyond regulatory compliance requirements, it makes good business sense for FSA to preserve the confidentiality and integrity of FSA data, and to safeguard the availability of its systems. There is a close relationship between methods for managing access to FSA systems and the enterprise security and privacy policies FSA wishes to enforce. FSA business objectives and the vision for the FSA security and privacy architecture will need to be coordinated and balanced to maximize the ability of FSA to achieve its business goals and still meet security objectives.
- **Enterprise Complexity** - Current FSA systems employ a variety of processes to accomplish similar enrollment and access management goals. The Participation Management system provides central services for several systems, but many standalone processes have been developed to satisfy the needs of individual systems. The FSA Enrollment and Access Management vision must accommodate the complexity and specific requirements of Participation Management and the isolated systems while aiming toward consolidation and simplification of processes when possible.
- **Solution Flexibility** - FSA systems will not remain static. A number of system reengineering and consolidation efforts are already underway. New and developing technologies will become integrated into the FSA environment. A variety of other examples were also brought up during workshops and interviews that illustrate the



Data Strategy Enterprise-Wide Enrollment and Access Management Business Objectives and High-Level Requirements

need to include flexibility requirements in the enrollment and access management vision.

- **Technology** - Many of the FSA high-level requirements for enrollment and access management involved new functions that may require additional technologies or technical solutions. Examples identified during working sessions include enterprise access management across multiple systems, single sign-on functions, automation of enrollment and access management, and user self-service capabilities. Before they are incorporated into the FSA vision or high-level designs, technical components will need to be carefully evaluated to make sure they represent an appropriate balance between functionality and cost.
- **Effective Communication Processes** - Enrollment and Access Management systems are important as entry points and ongoing contact points for FSA Trading Partners. Interactions with Trading Partners can be effective communications channels that FSA can leverage for a variety of purposes. As several participants pointed out, FSA should have well-defined and effective communications processes that provide users with consistent messages and efficient user support for enrollment and access management.
- **Other FSA Initiatives** - Enrollment and Access Management must be coordinated with several other projects across the enterprise. Integration of this effort with RID and other Data Strategy projects will provide a foundation for streamlining Trading Partner enrollment and user access management across the enterprise. This effort must also be coordinated with the FSA Security Architecture development work, Integrated Partner Management responsibilities, Case Management Oversight efforts, and the PIN Site Reengineering project.
- **Benefits** - Enrollment and Access Management will create a vision for an enterprise approach to enrolling and managing access for Trading Partners. Consolidated processes and tools will improve FSA control of critical enrollment and access management functions, increasing the efficiency of these processes and decreasing administrative costs. Most importantly, an enterprise approach will insulate Trading Partners from the complexities of the internal FSA enrollment and access management processes and improve the effectiveness of FSA service delivery.

Next steps for the Enrollment and Access Management Team will include the following tasks:

- **Validate Business Objectives and High-Level Requirements** - Enrollment and Access Management must continue validating these Business Objectives and High-Level Requirements as a proposed vision for Enrollment and Access Management is created.
- **Determine Priority of Business Objectives** - These Business Objectives and High Level Requirements were documented without trying to determine relative priorities or deployment impacts. The Enrollment and Access Management team will facilitate a process to help FSA prioritize these requirements during the early stages of high-level design.
- **Develop High-Level Designs** - The Enrollment and Access Management Team will facilitate working sessions to develop and document high-level designs for a recommended solution. Additional meetings with individual systems and groups of



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systems will be conducted to assess the effectiveness of proposed high-level designs and to engage stakeholders in the development of appropriate business cases.

- **Communicate the Vision** - Enrollment and Access Management must work to socialize and communicate the eventual Enrollment and Access Management Vision throughout the FSA CIO organization and FSA business units.



Appendix A: Security Definitions of Access Management and Identity Management

During interviews, meetings, and working sessions to identify business objectives, the term “access management” was used in a broad sense to include all topics related to registering and gaining access to FSA systems and applications. This usage considered “access” to include user authentication, access control, administration of system user access accounts, development of access authorization policies, and the processes and forms used to approve a user request for access. The Enrollment and Access Management Team have used this broad definition of access management in this document, with appropriate qualification as necessary to maintain clarity.

In the field of information security, a more common definition of “access management” reserves this term for the authentication of users and direct control or restriction of user access to information resources. In other words, “access” in this sense refers to “front-end” security processes that directly mediate real-time user interactions with systems and applications, such as login and control of a user session. “Single Sign-on” functions would also fall under the definition of access management. This more restrictive definition of access management was used in the recently completed Security and Privacy Architecture Framework project. The boxes that fall within the dashed lines in Figure A1 illustrate the functions and processes that fit this definition.

In contrast, the concept of “Identity Management” is gaining wide acceptance as the term for “back-end” processes and tools, such as those that control authorization steps and processes for granting and configuring user access. Used in this sense, “identity management” covers processes and technologies for administration of access, including registration of users, security approval workflow tools, automation of security administration processes, password synchronization, delegation of administration, auditing access privileges, and management of data repositories for user identity information. The dotted-line box in Figure A1 depicts processes and functions usually considered to fall within “Identity Management”.

Access management and identity management must be closely integrated to effectively enforce an organization’s information access and security policies. Technology implementations of these security systems often share functions and components, such as the data repositories for storing user attributes and identity information. Some security vendor products combine functional capabilities from these two categories. In fact, a long-term goal in the information security world is to fully integrate access and identity management systems. This integration of access and identity management is currently feasible only in an environment that contains web applications and components. However, the distinction between management of access and identity remains important in an enterprise environment that extends beyond web applications. The technologies available to implement access management functions and identity management are quite different for legacy and mainframe systems.



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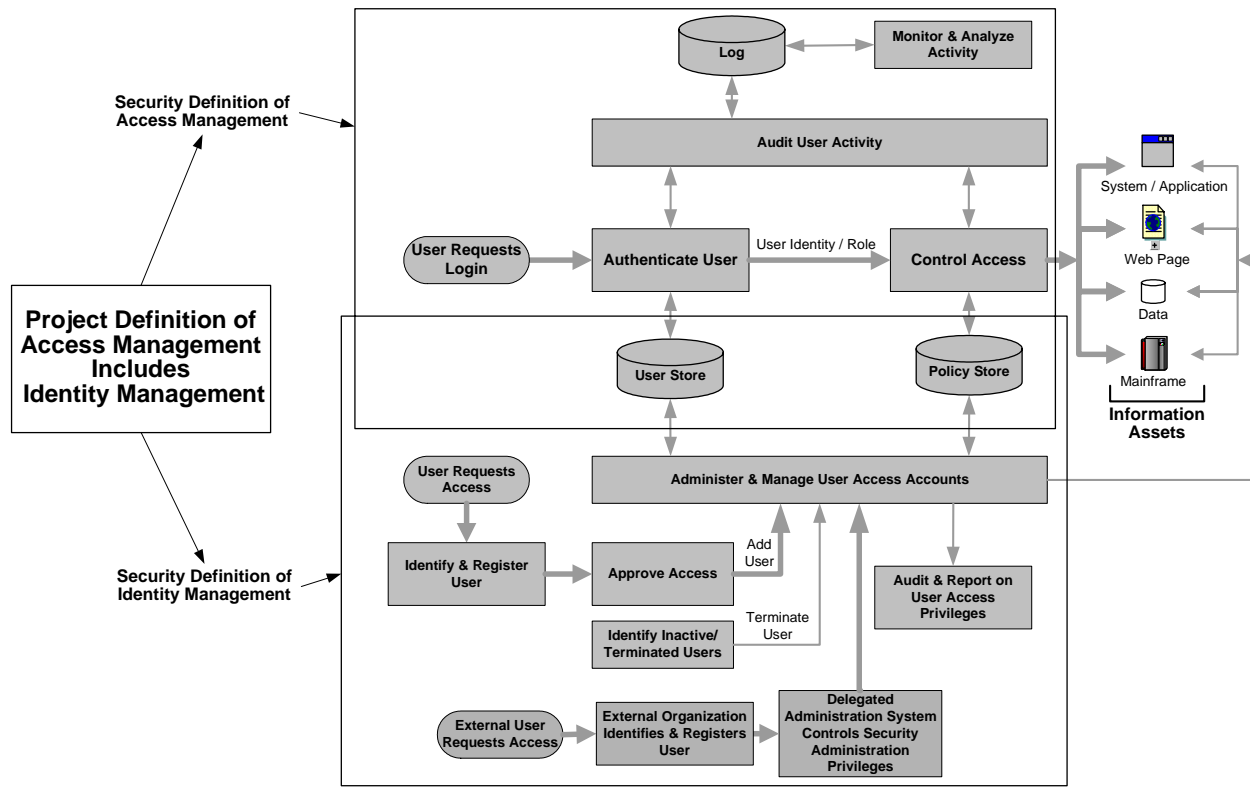


Figure A1 - Security Functions and Processes That Comprise Access Management and Identity Management



Appendix B: Business Objective Meeting Summaries

Refer to the Appendix_B_BusinessObjectiveSummaries.doc file.



Appendix C: Questionnaires

Refer to the Appendix_C_Questionnaires.doc file.



Appendix D: Business Integration Group Vision Framework

Refer to the Appendix_D_DRAFT BIG Integration Vision Framework v5.xls file.



Appendix E: Enrollment and Access Management Business Objectives Vision Framework

Refer to the Appendix_E_EAM Business Obj Vision Framework v22.xls file.